By "metabolic pathway essential for viability" we mean a metabolic pathway that must operate for the microorganism to exist in a state other than cell death or leading to cell death. This includes cell growth, resting and latent states.

By "substrate of the pathway" we mean the only or main substrate of the pathway such that the viability of the organism is dependent on the availability of this.

By "attenuating a microorganism" we mean killing it or at least decreasing its growth rate to an extent where the immune system of a human or animal host is able to contain or eliminate the microorganism. or a state, for example in a plant host, in which the microbe is rendered incapable of causing disease. This may mean that metabolism via the essential metabolic pathway is either fully or partially inhibited. It may not be necessary to fully inhibit the pathway to achieve useful pharmacological effects.

In a further aspect of the invention the essentiality of the metabolic pathways is determined by the presence or absence of particular nutrients. By this we mean that the microorganism may be adapted to remain viable in the absence of a particular nutrient such as glucose, glycerol or amino acids or nucleotides (in case of specific auxotrophs) by means of compensatory or shunt pathways which become essential in the absence of such nutrient and the normal pathway for metabolising such nutrient thus becomes the non-essential pathway.

The method of the invention may be used with any convenient microorganism, these include pathogens which have a restricted environment as far as nutrient options are concerned like *Candida albicans* (fungal infection), *Leptosphaeria maculans* (fungal plant pathogen, Idnurm *etal* ,Eukaryotic Cell 2002, vol 1. 719-724) & *Rhodococcus fascians* (plant pathogen) This is strikingly exemplified in many pathogens whose pathogenicity is dependent on intracellular survival and multiplication, a stage closely associated with the persistence or latency stage of *Mycobacterium tuberculosis*. The list of organisms which encompass such stage is given in Table 1 hereinafter.

The person of ordinary skill will be able to select convenient essential and non-essential metabolic pathways and substrates for use in the method of the invention. By way of non-limiting example it is convenient to target metabolic branch points. At such points enzymes from the two metabolic pathways compete for the common substrate. Control at branch points may depend on a number of factors including the growth medium, substrate concentration, the differential Km and the reversible inactivation of enzymes beyond the branch point.